This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1-20 (cancelled).

Claim 21 (currently amended): A method for treating migraine headaches and symptoms of migraine headaches in a human subject in need thereof, consisting essentially of ~~comprising~~ administering an effective amount of ~~a treatment composition comprising~~ a $Na^+K^+2Cl^-$ cotransporter antagonist that is capable of inhibiting Na^+ K^+2Cl^- cotransport in glial cells to ~~the central nervous system (CNS) of~~ the subject.

Claim 22-24 (cancelled).

Claim 25 (previously presented): The method of claim 21, additionally comprising administering an effective amount of a blood brain barrier permeability enhancer.

Claim 26 (previously presented): The method of claim 21, additionally comprising administering a hyperosmotic agent.

Claim 27 (previously presented): The method of claim 21, wherein the treatment composition is selected from the group consisting of furosemide, furosemide-related compositions, bumetanide and ethacrynic acid.

Claim 28 (previously presented): The method of claim 21, additionally comprising administering one or more agents selected from the group consisting of anticonvulsants and non-steroidal anti-inflammatory drugs.

Claim 29 (previously presented): The method of claim 28, wherein one of said anticonvulsant agents is divalproex sodium.

Claims 30-32 (cancelled).

Claim 33 (previously presented): The method of claim 25, wherein the blood brain barrier permeability enhancer is selected from the group consisting of leukotrienes, bradykinin agonists, histamine, tight junction disruptors, hyperosmotic solutions, cytoskeletal contracting agents and short chain alkylglycerols.

Claim 34 (cancelled).

Claim 35 (cancelled).

Claim 36 (currently amended): The method of claim ~~35~~ 21, wherein the $Na^+K^+2Cl^-$ cotransporter antagonist blocks spontaneous synchronized depolarizing oscillations of neuronal population activity in the central nervous system.

Claim 37 (currently amended): The method of claim ~~35~~ 21, wherein the $Na^+K^+2Cl^-$ cotransporter antagonist produces modulation of the chloride concentration in extracellular space in the central nervous system.

Claim 38 (cancelled).

Claim 39 (currently amended): The method of claim ~~38~~ 56, additionally comprising administering an effective amount of a blood brain barrier permeability enhancer.

Claim 40 (currently amended): The method of claim ~~38~~ 56, wherein the treatment composition is formulated to facilitate crossing of the blood brain barrier.

Claim 41 (previously presented): The method of claim 21, wherein the $Na^+K^+2Cl^-$ cotransporter antagonist is administered intranasally.

Claim 42 (currently amended): The method of claim ~~38~~ 56, wherein the ~~loop diuretic~~ treatment composition is administered intranasally.

Claim 43 (previously presented): The method of claim 21, wherein the $Na^+K^+2Cl^-$ cotransporter antagonist is administered directly into the cerebrospinal fluid.

Claim 44 (currently amended): The method of claim ~~38~~ 56, wherein the ~~loop diuretic~~ treatment composition is administered directly into the cerebrospinal fluid.

Claim 45 (currently amended): A method for treating migraine headaches in a mammalian subject in need thereof, comprising administering a cation chloride cotransporter antagonist to ~~the central nervous system of~~ the subject, wherein the cation chloride cotransporter antagonist is selected from the group consisting of: thiazide; and thiazide-like compositions.

Claim 46 (cancelled).

Claim 47 (currently amended): The method of either of claims 21 or ~~38~~ 56, wherein the treatment composition is administered transdermally for delivery to the CNS.

Claim 48 (currently amended): The method of either of claims 21 or ~~38~~ 56, wherein the treatment composition is administered in a sustained release formulation.

Claim 49 (currently amended): The method of either of claims 21 or ~~38~~ 56, wherein the treatment composition is administered in a dosage incorporated in a non-reactive carrier.

Claim 50 (currently amended): The method of either of claims 21 or ~~38~~ 56, wherein the treatment composition is delivered in a liposome formulation.

Claim 51 (currently amended): The method of either of claims 21 or ~~38~~ 56, wherein the treatment composition is administered by implantation of a formulation or therapeutic device at one or more target sites for delivery of the treatment composition to the CNS.

Claim 52 (previously presented): The method of claim 51, wherein the formulation or therapeutic device is actuatable externally upon onset of symptoms to deliver predetermined amounts of the treatment composition.

Claim 53 (currently amended): The method of either of claims 21 or ~~38~~ 56, wherein the treatment composition is administered in combination with a hyperosmotic agent.

Claims 54 and 55 (cancelled).

Claim 56 (new): A method for treating migraine headaches and symptoms of migraine headaches in a human subject in need thereof, comprising administering an effective amount of a treatment composition comprising a $Na^+K^+2Cl^-$ cotransporter antagonist that is capable of inhibiting $Na^+K^+2Cl^-$ cotransport in glial cells to the subject, wherein the $Na^+K^+2Cl^-$ cotransporter antagonist is selected from the group consisting of: bumetanide; and ethacrynic acid.